WHAT IS CLAIMED IS:

1. A fixing device for use in an image forming apparatus in which a high-frequency current is supplied to through a coil provided close to an endless member having a metal layer made of a conductive material and this endless member is caused to generate heat to heat a material to be fixed, wherein the fixing device is controlled in accordance with a plurality of electric power control patterns corresponding to electric power supply amounts for predetermined conditions, respectively.

2. The device according to claim 1, wherein the power control patterns are used to change a frequency or a duty ratio of the high-frequency current supplied.

3. The device according to claim 2, wherein the frequency to be changed is selected from a plurality of patterns previously stored in a memory table, in correspondence with a state of the image forming apparatus.

4. The device according to claim 2, wherein the frequency or duty ratio to be changed is selected from a plurality of patterns previously stored in a memory table, in correspondence with a predetermined voltage change amount.

5. The device according to claim 4, wherein the voltage change amount is a non-control object with respect to a voltage change caused in a shorter time

period than a predetermined time period.

6. An image forming apparatus comprising:

a photosensitive member for holding an electrostatic latent image;

an exposure device for forming an electrostatic latent image on the photosensitive member;

a developing device for supplying the electrostatic latent image formed on the photosensitive member, with a developer, to form a developer image; and

a fixing device for heating a transfer member to which the developer image formed by the developing device is transferred, thereby to fix the developer image to the transfer member, wherein

the fixing device flows a high-frequency current through a coil provided close to an endless member having a metal layer made of a conductive material, thereby heating the endless member, to heat the transfer member and the developer image, and the fixing device is controlled by a plurality of electric power control patterns corresponding to electric power amounts which can be supplied for predetermined conditions, respectively.

7. The apparatus according to claim 6, wherein the power control patterns are used to change a frequency or a duty ratio of the high-frequency current supplied.

8. The device according to claim 7, wherein the electric power control patterns are used to supply an electric power within the range of the difference between a maximum electric power which can be inputted and the electric power respectively consumed by an image forming section for rotating the photosensitive member to enable formation of the electrostatic latent image on the photosensitive member, the exposure device, and the developing device.

9. The apparatus according to claim 6, wherein the electric power control patterns are used to detect a change of a power source voltage capable of supplying a high-frequency current to be supplied, to supply a high-frequency current having an optimal frequency or duty ratio.

10. The device according to claim 6, wherein the electric power control patterns are used to supply an electric power within a range of a difference between a maximum electric power supply amounts and a limit amounts of the power consumption by an image forming section for rotating the photosensitive member to enable formation of the electrostatic latent image on the photosensitive member, the exposure device, the developing device, and other components which can be simultaneously operated.

11. The apparatus according to claim 10, wherein the electric power control patterns are used to detect

a change of a power source voltage capable of supplying a high-frequency current to be supplied, to supply a high-frequency current having an optimal frequency or duty ratio.

12. An image forming apparatus comprising:

a photosensitive member;

an exposure device for forming an electrostatic latent image on the photosensitive member;

a developing device for supplying a developer for the electrostatic latent image formed on the photosensitive member, to form a developer image; and

a fixing device for heating a transfer member to which the developer image formed by the developing device, to fix the developer image, wherein

the fixing device flows a high-frequency current through a coil provided close to an endless member having a metal layer made of a conductive material, thereby heating the endless member to heat the transfer member, the developer image,

the fixing device is controlled by a plurality of electric power control patterns corresponding to electric power amounts which can be supplied respectively for predetermined conditions,

a maximum electric power which can be inputted to the coil is supplied immediately after electric energirized,

an electric power inputted to the coil is reduced

in accordance with timings at which an image forming section for rotating the photosensitive member to enable formation of the electrostatic latent image on the photosensitive member, the exposure device, the developing device, and other mechanisms or components which can be operated simultaneously together with the section and devices are operated, and

if a power source voltage changes, a value of a maximum electric power which can be inputted at the time point when the power source voltage changes is reduced to a small value, and is thereafter supplied to achieve heating.

13. The apparatus according to claim 12, wherein the electric power control patterns of the fixing device are used to change a frequency or duty ratio of a high-frequency current to be supplied.